

METHOD AND STRUCTURE FOR PRODUCING HIGH PERFORMANCE LINEAR ALGEBRA ROUTINES USING LEVEL 3 PREFETCHING FOR KERNEL ROUTINES

ABSTRACT

A method (and structure) for executing linear algebra subroutines includes, for an execution code controlling an operation of a floating point unit (FPU) performing a linear algebra subroutine execution, unrolling instructions to prefetch data into a cache providing data into the FPU. The unrolling causes the instructions to touch data anticipated for the linear algebra subroutine execution.